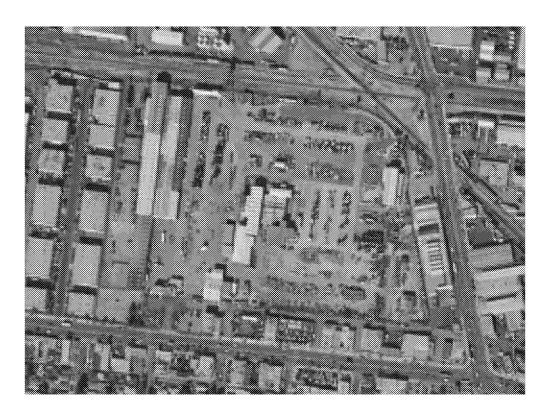
# Phase II Soil Vapor, Soil, and Groundwater Investigation

# Ameron International Property 4635 Firestone Boulevard South Gate, California



Prepared for:
Overton Moore Properties
Gardena, California

Prepared by:

Premier Environmental Services 22025 Ventura Blvd., Suite 203 Woodland Hills, CA 91364

January 2004





January 29, 2004

### VIA E-MAIL AND OVERNIGHT COURIER

Mr. Stan Moore, CEO Overton Moore Properties 1125 West 190th Street, Suite 200 Gardena, California 90248

Subject: Ameron International Property

4635 Firestone Boulevard, South Gate, California

Report - Phase II Soil Vapor, Soil, and Groundwater Investigation

Dear Mr. Moore:

In accordance with the request of Overton Moore Properties (OMP), Premier Environmental Services has conducted a "Phase II Soil Vapor, Soil, and Groundwater Investigation of the above-referenced property. The approximately 30-acre property is located in the City of South Gate, California.

We trust the accompanying report provides OMP with the information you require at this time. The Appendices for this report are presented in a separately bound stand-alone document and have not been transmitted via e-mail. If you have any questions regarding the information presented in the report, or if Premier can be of further service, please contact us at (818) 348-9700.

Sincerely,

PREMIER ENVIRONMENTAL SERVICES, INC.

Köbin 1 ferber

Robin J. Ferber, RG, REA Senior Consultant

RJF; CC

(5) Addressee

Carmen Caceres Staff Geologist

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# PHASE II SOIL, SOIL VAPOR, AND GROUNDWATER INVESTIGATION REPORT

#### 1.0 INTRODUCTION

This report presents Overton Moore Properties (OMP) with the results of the Phase II soil, soil vapor, and groundwater investigation conducted by Premier Environmental Services, Inc. (Premier) at the Ameron International (Ameron) property located at 4635, 4813, and 4671 Firestone Boulevard in South Gate, Los Angeles County, California (the "subject property"; Figure 1). The Phase II investigation was conducted to evaluate *Recognized Environmental Conditions* (RECs) and suspect environmental conditions at the subject property that were documented in Premier's December 22, 2003 Phase I Environmental Site Assessment (Phase I ESA) report.

# 1.1 Organization of the Report

This section of the report, Section 1, presents a brief discussion on background information pertaining to the subject property. Section 2 is a summary of findings of the Phase I ESA in order to provide a perspective on the rationale of the subsurface investigation. The investigative methodology and results of the Phase II activities are discussed in Section 3.

# 1.2 Site Background

#### 1.2.1 Site Location

The subject property is located in a mixed industrial, commercial, and residential area, and is currently used as a support facility to provide concrete forms for other Ameron plants. The subject property is divided into two parcels (Parcel No. 2 and Parcel No. 3) with a total area of 28.5 acres. The subject property has an onsite elevation of approximately 114 feet above mean sea level (MSL), and is relatively flat-lying. Generally, the land surface at this site slopes gently to the southeast.

Immediately north of the subject property is a Southern Pacific Railroad right-of-way followed by the Los Angeles Chemical Company and Rhone Poulenc Basic Chemicals Company; to the south are commercial properties (including a former ARCO service station near the southeast corner) followed by Firestone Boulevard and commercial and residential properties; and to the west and east are commercial/industrial properties (Figure 2). There are no natural stream courses at or near the subject property. All drainage for the subject property and surrounding areas are developed drainages. The nearest surface water is the concrete-lined, Los Angeles River, located approximately 1 mile east of the subject property. Site drainage has been achieved by constructing slopes away from buildings and by southerly surface runoff to storm drains. The onsite storm drains discharge to municipal storm drains.

# 1.2.2 Physical Site Setting

The subject property, which is owned and operated by Ameron and historically used as a concrete pipe and form manufacturing facility, is a roughly rectangular-shaped parcel, occupying approximately 28.5 acres. Figure 2 is a site plan of the subject property. There are fourteen structures of industrial and commercial use that are present on the subject property. The Southern Pacific railway runs adjacent to the facility along the northern property boundary. Various railroad spurs are present within the subject property and link together in the central northern portion of the property to join a spur entering the west side of the Ameron facility. The subject property is bordered on all sides by light industrial/commercial land.

Current Ameron manufacturing operations are limited to three large structures on the west portion of the subject property. The remaining structures are currently either vacant or used for the storage of old equipment and miscellaneous materials. Large metal cutting, drilling, welding, and bending machinery were observed in the Machine Shop and Fabrication Building. Concrete pipe, steel forms and other associated equipment used in the concrete pipe fabrication process are stored throughout the Main Storage Yard. An approximately 26,000-gallon above-ground water storage tank, a 20,000-gallon propane tank, and a 500-cubic yard surge tank are present in the north central portion of the subject property. Two inactive deep groundwater production wells that were formerly used by Ameron to provide a water source for their manufacturing operations are located on the northern portion of the subject property near the water storage tank. The wells

were likely installed in the 1920s. Information related to the construction design of the production wells was not discovered.

#### 1.2.3 Geology and Hydrogeology

The Phase I ESA provides a detailed account of site geology and hydrogeology. The subject property is located within the Los Angeles Forebay Area of the Central Basin (California Department of Water Resources [CDWR], 1961). The Central Basin covers most of the Coastal Plain of Los Angeles County east and northeast of the Newport-Inglewood uplift. The Central Basin is bounded on the southeast by the Los Angeles -Orange County line, on the west and south by the Newport-Inglewood uplift, and on the north by the Hollywood Basin and a series of low hills, which are interrupted by the Los Angeles and Whittier Narrows. Recent alluvium, the Lakewood Formation, and the San Pedro Formation comprise the sediments of the Los Angeles Forebay Area (CDWR, 1961). These sediments are known to exist to a depth of 1,600 feet below ground surface (bgs). The Recent Alluvium in the area of the subject property is found on the Downey Plain, is approximately 150 feet thick, and consists of the Bellflower aquiclude and the Gaspur aquifer. These units are of most significance to this subsurface investigation. The Bellflower aguiclude is reported to be approximately 60 feet thick and consists of silt and clay; however, there are numerous areas where it consists of clayey sand and gravel where its effectiveness as an aguiclude is limited (CDWR, 1961). The Gaspur aguifer consists mainly of sand and gravel with limited clay and it reportedly extends from approximately 75 to 150 feet bgs in the area of the subject property (CDWR, 1961).

The depth to first encountered groundwater beneath the subject property, as observed from the grab groundwater sampling activities of this investigation, is estimated to be 55-60 feet bgs. To date, the groundwater flow direction beneath the subject property has not been determined. However, based on information obtained from surrounding investigations (Premier, December 22, 2003), we estimate the groundwater flow direction is to the flows north to northwest. Figure 3 displays the interpreted groundwater flow map developed for the subject property based on groundwater flow information obtained from adjacent properties.

#### 2.0 SUMMARY OF PHASE I ESA FINDINGS

The Phase I ESA (Premier, December 22, 2003) described the RECs and suspect environmental conditions discovered at the subject property. The term REC as defined by the ASTM Designation E 1527-00 "...means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release or any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or in surface water of the property. The discovery of the RECs and suspect environmental conditions was based on a comprehensive review of available documents, observations made during multiple site visits, historical information, regulatory agency interviews, and personnel interviews. Provided below is a summary of the RECs and suspect environmental conditions discovered at the subject property.

#### • Historical Use of Solvents

Information was discovered to indicate that solvents were used historically at the subject property. Solvent use was documented in the area of the former Amercoat Building as well as the large rectangular manufacturing buildings on the western portion of the subject property; however, the type of solvents used and the locations of some of the solvent use areas were not discovered. In addition, a methylene chloride solvent degreaser is listed on a South Coast Air Quality Management District (SCAQMD) permits for the subject property. Four underground storage tanks (USTs) were noted in June 1943 blueprints for the Amercoat building. One of the USTs was labeled as containing methyl ethyl ketone (MEK) and the contents of the three remaining USTs were not discovered. It is not known if the USTs were removed from the Amercoat Building area. References to solvent use and storage areas were also made during site inspections conducted by the Los Angeles County Fire Department (LACFD).

# Groundwater Concerns Associated with Adjacent Former ARCO Service Station Property

Shallow groundwater beneath the subject property is interpreted flow to the north-northwest based on groundwater data from leaking UST properties located to the southeast and north of the subject property. The potential for a fuel hydrocarbon and fuel oxygenate groundwater contaminant plume affecting groundwater beneath the subject property and originating from the former ARCO service station located near the southeast corner of the Ameron facility is considered high.

# • Service Garage Area

Three USTs were abandoned-in-place in the service garage area. Two of the USTs contained motor oil and the remaining UST contained waste oil. No further action status was obtained in November 1990 for the three abandoned-in-place USTs. We did not discover Phase II investigation reports for the service garage area where the three USTs were abandoned-in-place.

In addition to the three USTs that were abandoned-in-place in the garage service area, numerous concrete patches as well as a concrete lined work trench were noted in the service garage. Four steel covers, possibly associated with clarifiers/sumps, were observed outside of the garage building.

#### Paint Booths

Three areas containing paint booths were discovered on the subject property. Paint booth operations have the potential to affect underlying soil with hazardous materials.

#### • Machine Shop/Fabrication Building/Maintenance Shop

Evidence of welding operations, oil—like staining (both on the slab and in subgrade machinery vaults), slab discoloration, metal particulate accumulations, and multiple

concrete patches and metal vaults were observed in the Machine Shop, Fabrication Building, and Manufacturing Building.

# Railroad Spurs

Railroad spurs are present in the northern and south central portion of the subject property. The ballast of some railroad spur areas in the Los Angeles area has elevated metals concentrations.

# • Sandblasting Areas

Four sandblasting areas were discovered on the subject property. Sand blasting operations can at times generate metal particulates in adjacent soil areas.

# • Suspected Septic Tanks

The potential for hazardous materials disposal into the two suspected septic tanks on the subject property has not been investigated.

#### • Former Above-ground Storage Tanks (ASTs)

Multiple historical ASTs were documented at the subject property. We did not discover information to indicate whether soils beneath the former AST locations have been investigated for the presence of hazardous materials.

# • Electrical Transformers

The potential for soil adjacent and downslope of the three areas of liquid cooled electrical transformers onsite to contain PCB cooling oils has not been previously evaluated.

# • Stripping Area

The surface soil of an approximately 30 foot by 30 foot portion of the stripping area appeared discolored during our site reconnaissance. It was observed on the southern portion of the spinning plant.

# Hazardous Materials Storage Area Shed

Evidence of minor oil-like spillage was noted on the slab of the hazardous materials storage shed was observed. We did not discover environmental investigations of soil beneath this area.

# • Spun Pipe Area

The use of hazardous materials in the area of the three-stage clarifier in the spun pipe area of the subject property is considered possible and should be investigated.

# • Former Steel Cage Building

This building was damaged by fire in March 2003 and internal access is prohibited by Ameron due to safety reasons.

# • Historical and Active Sumps

Based on a review of historical documents (primarily blueprints), up to 15 sump locations were identified in the open work area and near the spinning building.

# • Liquid-Filled Vault

A partially liquid-filled vault was identified on the east central portion of the open yard area. We were not able to obtain information as to nature of the vault's contents.

#### Historical Ameron Groundwater Production Wells

Two former deep groundwater production wells are present on the northern portion of the subject property. The wells appeared to have been used by Ameron as a source of water from at least the 1920s through the 1980s. Information relating to the design, depth, and condition of the wells was not discovered.

Based on the information or lack of information pertaining to the above-listed RECs and suspect environmental conditions, Phase II investigations were conducted.

#### 3.0 PHASE II SUBSURFACE INVESTIGATION

The Phase II subsurface investigation was conducted to evaluate the RECs and suspect environmental conditions listed in Section 2. The Phase II investigation was initiated in November 2003 and was completed in December 2003 and consisted of soil vapor, soil, and groundwater sampling programs.

#### 3.2 Pre-Field Activities

The pre-field activities consist of tasks that were completed prior to initiating the Phase II investigations. These include the preparation of a site-specific Health and Safety Plan, obtaining necessary temporary well permits, and conducting a geophysical survey to evaluate for the presence of metallic subsurface utilities. Coring of concrete surfaces was also conducted. Report Sections 3.1.1 through 3.1.3 provide more detailed discussions of specific pre-field activities.

#### 3.2.1 Preparation of Site-Specific Health and Safety Plan

A site-specific Health and Safety Plan (HSP) was prepared and approved by a certified industrial hygienist (CIH) in accordance with 29 CFR 1910.120. The HSP addressed environmental safety concerns that may be encountered during field activities related to groundwater sampling, soil vapor sampling, and soil sampling events. The HSP (1) identified and described the potentially hazardous substances that may be encountered during our field work; (2) specified protective clothing and monitoring equipment to be used during on-site activities; and (3) outlined measures to be implemented in the event

of an emergency. Onsite personnel were required to review the HSP prior to commencement of the field activities and to conduct all field activities in accordance with plan specifications.

#### 3.2.2 Geophysical Survey and Utility Clearance

Advanced Geoscience of Palos Verdes, California, was retained to perform a multi-sensor utility survey (RD-600 utility locator, Fisher TW-6 M-scope shallow focus metal detector, Dynatel 500A utility locator, and GSSI SIR-3 ground penetrating radar unit coupled with a 500 MHz antenna) of the proposed drilling areas on the Site using electromagnetics and ground-penetrating radar. Drilling locations were moved 1 to 10 feet from their originally proposed locations whenever the California Registered Geophysicist interpreted potential subsurface utilities.

In addition to the geophysical survey, Dig Alert, a state-wide agency, was contacted to mark any public underground utilities that may be entering the subject property.

# 3.2.3 Concrete/Asphalt Borings

A significant portion of the subject property is covered with concrete or asphalt. A coring company (Concrete Coring Company) was contracted to core through the concrete or asphalt at each sample location. Concrete/asphalt cores ranged from 4-inches to 5 feet in thickness, and 4 to 6-inches in diameter. The thickest concrete cores were located in the Fabrication Building, Garage, and former Spin Building. Water and cuttings generated from the coring activities were contained and cleaned out of the core with the use of a wet vacuum. The core removed from the hole was set aside and used to patch the hole after sampling activities had been completed.

# 3.2.4 Temporary Groundwater Well Permits

Los Angeles County of Los Angeles, Department of Health Services' Public Health Programs-Environmental Health Division (County) requires that well permits are obtained for borings deeper than 60 feet and for borings in which groundwater sampling is planned. On November 10, 2003 and December 9, 2003, temporary well permits were acquired from the County for the 14 temporary groundwater wells completed at the subject property.

# 3.2.5 Laboratory Data Quality Objectives and Laboratory Analyses

Specifying the analytical data quality objectives to the laboratory is critical to obtaining data that are valid defensible. The analytical methods for metals, VOCs, total petroleum hydrocarbons, and polychlorinated biphenyl compounds (PCBs) were specified to the laboratory prior to conducting the field work.

# 3.2.5.1 Analytical Requirements

The soil vapor samples were analyzed by Jones Environmental Services (Fullerton, CA) via EPA Method 8260B. The soil samples were analyzed by Advanced Technology Laboratories (ATL; Signal Hill, CA) for the 17 metals listed in the California Code of Regulations, Title 22, Article 11 (CCR Metals) via EPA Method 3050A/7471, for total petroleum hydrocarbons (carbon chain analysis) via EPA Method 8015M, and for VOCs via EPA Method 8260B. The groundwater samples were analyzed by ATL for CCR Metals via EPA Method 6010/7000 Series, for total petroleum hydrocarbons via EPA Method 8015M, for VOCs via EPA Method 8260B and for polychlorinated biphenyls (PCBs) by USEPA Method 8082.

#### 3.2.5.2 Quality Assurance/Quality Control

Premier specified analytical data quality objectives in order to meet the requirements for quality assurance/quality control, i.e., precision, accuracy, reproducibility, completeness, and comparability (PARCC). The laboratory followed the minimum quality control requirements specified by each analytical method. If the method does not specify limits or guidelines for quality control requirements, the laboratory complied with the default recovery limit of 80 – 120% and a relative percent difference (RPD) of 20% for wet chemistry. For extractable organics and metals, the recovery limit is 50-150% and the RPD was 50%. A matrix spike and matrix spike duplicate was performed for each batch. A laboratory control sample (LCS) was also prepared and analyzed for each matrix. A method blank was analyzed after each standard was calibrated. For the gas chromatography (GC)/mass spectrophotometer (MS) analyses, surrogates are spiked into every sample, blank, QC samples, and standard.

# 3.3 Soil Vapor Sampling

The rationale and methodology of the soil vapor sampling, the analytical results, and the evaluation of the soil vapor data are discussed in Sections 3.3.1 through 3.3.3.

#### 3.3.1 Rationale and Methodology

To provide an unbiased sampling strategy, soil vapor sample locations were initially proposed in the centers of a systematic 100-foot grid that was superimposed over the entire subject property. Biased soil vapor sample locations were also located in areas where potential sources of VOCs were suspected, based either from the document review or from the site reconnaissance (e.g., in the Fabrication and Maintenance Buildings and in the Machine Shop). Prior to collecting the soil vapor samples, a geophysical survey was conducted in the immediate vicinity of each sampling grid or location. If the survey indicated that subsurface structures are present in the area of the proposed sample location, then the sample location was moved. Proposed soil vapor sample locations were also moved or eliminated (e.g., to the east of the Stripping Building) when drilling refusal was encountered.

Figure 4 shows the 93 locations where the soil vapor samples were collected. The samples were identified either by its location relative to the grid, or by its location in a specific structure at the subject property (if appropriate), or by its grid coordinates. For example, the prefix SV-E5 indicates that a soil vapor (SV) sample collected from a location with the grid coordinates of E5 and SV-MS1 represents a soil vapor sample collected from the machine shop (MS), and it is location "1". The sampling depth was designated by adding as a suffix to the boring location designation, such that the notation SV-MS1-15', for instance, refers to a 15-foot sample collected at boring SV-MS1.

The soil vapor samples were collected in accordance with the procedures and analytical reporting limits recommended by the Los Angeles Regional Water Quality Control Board (LARWQCB) (LARWQCB, 1997) and the joint guidance issued by the Regional Water Quality Control Board and Department of Toxic Substances Control (DTSC, 2003).

At each sampling location, soil vapor was withdrawn from the tubing using an electric vacuum pump that had been purged prior to sample collection. Soil vapor samples were collected at depths of 10 and 20 feet bgs by using vapor-tight, 100 cc syringes, and analyzed on-site by a mobile laboratory (Jones Environmental Laboratories). The 10-foot samples were collected to provide an indication of possible surface sources of VOCs, whereas the 20-foot samples were collected to provide information on the vertical migration and attenuation of any surface releases. At two locations (SV-L3 and SV-M4), however, soil vapor samples were collected only at the 20 feet bgs sampling interval as no sample recovery was obtained at the 10-foot interval.

The soil vapor samples were analyzed for VOCs and oxygenates via EPA Method 8260B [gas chromatograph /mass spectrometer (GC/MS) analysis]. Sixteen duplicate samples, equivalent to approximately 20 percent, were collected for QA/QC purposes. Ambient air samples were also collected and analyzed for the same suite of analytes.

# 3.3.2 Soil Vapor Sampling Analytical Results

The formal laboratory reports and chain-of custody documentation are presented in Appendix A (stand-alone bound document). Table 1 is a tabulated summary of the detected analytes in the soil vapor samples. The Table shows the locations where a soil vapor sample was collected (Boring ID), the sample identification number (Sample ID), the date when the soil vapor sample was collected, and the detected concentrations expressed in micrograms per liter (ug/L) volume. If a specific analyte was not detected, the concentration is shown as being below the corresponding practical quantitation limit (PQL) for the specific analyte.

VOCs were detected in 11 out of 93 soil vapor sampling locations. Figure 4 presented the soil vapor sampling locations and concentrations of VOCs detected. None of the VOCs detected, described below, exceeded 1.5 ug/L and therefore are considered relatively low concentrations. Five of the 11 locations are at the south/southeastern corner of the Ameron property, and VOCs were detected at depths of 10 and 20 feet bgs. A few of the locations where fuel hydrocarbon related VOCs were detected were in the northeast portion of the subject property where former above ground storage tanks containing petroleum products were noted.

The more frequently detected VOCs were benzene (0.63 ug/L to 0.68 ug/L), ethylbenzene (0.97 ug/L to 1.4 ug/L), and xylenes (0.81 ug/L to 1.1 ug/L). Toluene was detected in only one sample, SV-N4, with a concentration of 0.77 ug/L at a depth of 10 feet bgs. Three locations (SV-H10, SV-K8 and SV-K10) on the northeastern portion of the Ameron property showed concentrations of ethylbenzene (0.97 to 1.4 ug/L) and xylenes (0.81 to 1.1 ug/L). Two locations (SV-RR-8 and SV-RR-10) along the railroad tracks showed concentrations of ethylbenzene (0.98 to 1 ug/L) at 20 feet bgs, but did not have detectable levels at the shallower depths of 10 feet bgs. Benzene was also detected in SV-RR-8 at a depth of 20 feet bgs at a concentration of 0.68 ug/L, but was not detected at the shallower depth of 10 feet bgs.

The VOC 1,1-dichloroethene (DCE) was detected in only one soil vapor sample, SV-K3-20, at a concentration of 0.65 ug/L. Although the single detection of 1,1-DCE was at a depth of 20 feet, there was no detectable level of 1,1-DCE at the shallower depth of 10 feet bgs. The VOC 1,1,1-trichloroethane (TCA), with a concentration of 0.7 ug/L, was detected in only one of the soil vapor samples, SV-MS1, which was collected in the area of the machine shop. 1,1,1-TCA was detected at a depth of 10 feet bgs (sample SV-MS1), but was not present at the deeper depth of 20 feet bgs.

# 3.4 Soil Sampling Activities

The rationale and methodology of the soil sampling, the analytical results, and the evaluation of the analytical data are discussed in Sections 3.4.1 through 3.4.3.

# 3.4.1 Rationale and Methodology

Biased soil sample locations were located in areas where potential sources of petroleum products, elevated metal concentrations, VOCs use, and/or PCBs were suspected. The soil sampling locations were based on the results of the December 22, 2003 Phase I ESA. The soil sample locations were moved, when possible, or eliminated when drilling refusal was encountered during sampling.

Figure 5 shows the 54 soil boring locations. The soil samples were identified by their location relative to a specific structure or feature at the subject property. For example,

SS-FB-1 is a soil sample (SS) collected from the Fabrication Building (FB), and it is sample "1".

Selected soil samples were collected at depths of 1, 5, 10, and 20 feet bgs. Soil samples were collected at depths of 1 foot and 5 feet bgs to provide an indication of possible surface sources of TPH, CCR metals, VOCs, and PCBs. Samples were collected from 10 and 20 feet bgs to provide information on the potential vertical migration and attenuation of any discovered surface releases of hazardous materials.

Soil descriptions, using the Unified Soil Classification System, were recorded for each sampling interval, and those observations were recorded on boring logs. Organic vapor measurements were monitored with a Photo Ionization Detector (PID). In addition, olfactory and visual evidence of contamination was recorded on field borings logs. Copies of boring logs are presented in Appendix B.

The soil samples were collected in general accordance with the procedures recommended by the American Society for Testing and Materials (ASTM), D6282-98 Standard Guide for Direct Push Soil Sampling for Environmental Site Characterizations. At each sampling location, soil was collected using a direct push probe rig equipped with an 18-inch split spoon sampler containing an acetate liner. The soil samples were capped using Teflon tape and plastic end caps, labeled, placed in a cooler with ice, and transported under chain-of-custody protocol to the analytical laboratory for analysis.

#### 3.4.2 Results of Soil Sampling Activities

The soil column at the subject property is relatively uniform across the property, with no major confining layers encountered during drilling. Soils beneath the subject property, as observed from borings and temporary monitoring wells installed throughout the subject property, generally consisted of the following:

- From ground surface to approximately 20 feet below ground surface (bgs), the soil is very fine to fine sand;
- From 20 to 30 feet bgs, the soil is composed primarily of silt with some intercalated clays and sands;

- From approximately 30 to 45 feet bgs, the soil is very fine to fine sand
- From approximately 45 to 55 feet bgs, the soil is composed of very fine silty sands and silt;
- From approximately 55 to 60 feet bgs, the soil is wet to saturated silty fine sand to fine sand, with clay seams in some locations, and represents the zone were first groundwater is encountered.

#### 3.4.2.1 Organic Vapor Concentrations

PID readings of organic vapors ranged from non-detect to 1,200 parts per million (ppm) equivalents. The highest detected value was recorded in the former Stripping Building in a 30x30 foot area of black discolored surface soil. Recorded PID readings are shown on the boring logs presented in Appendix B.

# 3.4.2.2 Soil Sample Analytical Results

The formal laboratory reports and chain-of custody documentation are presented in Appendix C (stand-alone bound document). Tables 2 and 3 are tabulated summaries of the detected analytes in the soil samples. Figure 5 presents the locations of the soil samples and the analytical test results for TPH and VOC. Table 2 shows the analytical data for the detected CCR metals and Table 3 shows the analytical data for the detected VOCs and TPH carbon chain analyses. Both Tables indicate the location where the soil sample was collected (Boring ID), the sample identification number (Sample ID), the date when the soil sample was collected, and the detected concentrations. The VOC concentrations are expressed in micrograms per kilogram (ug/kg) whereas the TPH and metal concentrations are expressed in milligrams per kilogram (mg/kg). If a specific analyte was not detected, the concentration is shown as being below the corresponding PQL for the specific analyte.

#### 3.4.2.2.1 CCR Metals

CCR metals were analyzed in soil samples collected from various depth intervals in 53 boring locations at the subject property. The CCR metal results for the soil samples

(Table 2) indicate that antimony (1–24 mg/kg), arsenic (1–82 mg/kg), barium (32-160 mg/kg), cadmium (1-1.8 mg/kg), total chromium (3.5-88 mg/kg), cobalt (3-22 mg/kg), copper (5-110 mg/kg), lead (1-69 mg/kg), mercury (0.1-14 mg/kg), molybdenum (1-76 mg/kg), nickel (3-33 mg/kg), selenium (49 mg/kg), thallium (1-1.6 mg/kg), vanadium (13-56 mg/kg), and zinc (17-140 mg/kg) were detected in the soil samples. Selenium was detected in only one sample at a depth of one foot bgs. Beryllium and silver were not present at detectable levels in all of the soil samples.

Arsenic exceeded the commercial PRG of 1.6 mg/kg (U.S. EPA Region 9, October 1, 2002) in some of the soil samples analyzed for CCR metals. Arsenic is a naturally occurring metalloid that in California soils frequently occurs at a concentration higher than the PRG. The background concentrations of arsenic in California range from 0.59 to 11 mg/kg (Bradford, et.al., 1996). Therefore, with the exception of two soil samples (RR-6-1' @82 mg/kg and RR-8-5' @40 mg/kg) collected in the area of the central railroad spur, the range of the arsenic concentrations detected at the subject property is within the range of background levels. PRGs are intended to be generic and are based on exposures that may not necessarily reflect site conditions (U.S. EPA Region 9, 2002). In fact, the memorandum from U.S. EPA Region 9 clearly states that PRGs should always be considered in conjunction with other benchmarks, such as background levels, before establishing a final cleanup level for a particular site.

#### 3.4.2.2.2 VOCs

VOCs were analyzed in soil samples collected from 17 locations, namely, four samples from the Service Garage area, 11 from the former Amercoat Building area (to evaluate for the former reported solvent USTs), one from the area where the septic tank is located, and one from the Stripping Building (Table 3). Five of the 11 investigative borings from which the collected soil samples were analyzed for VOCs were drilled in the area of the former Amercoat Building and were subsequently converted into temporary groundwater wells. In the temporary wells (HP-8, HP-10, HP-11, HP-12, and HP-3), soil samples were collected at 5 foot intervals to the depth of first groundwater (approximately 55-60 feet bgs). Soil samples collected from the five aforementioned temporary wells were analyzed for VOCs at 10 foot intervals to evaluate for VOCs that may have been associated with the former Amercoat Building solvent USTs.

VOCs were detected in one soil sample (STG-1-1') collected in only one out of the 17 boring locations that were sampled, at a depth of one foot bgs. The location of the boring, STG-1, was collected from an approximately 30-feet long by 30-feet wide, black discolored area of soil located inside the Stripping Building in the central portion of the Ameron property. The detected VOCs were 1,2,4-trimethylbenzene (6,300 ug/kg), 1,3,5-trimethylbenzene (2,100 ug/kg), 4-isopropyltoluene (660 ug/kg), ethylbenzene (2,100 ug/kg), m- and p-xylenes (14,000 ug/kg), o-xylenes (4,100 ug/kg), n-butylbenzene (1,000 ug/kg), n-propylbenzene (510 ug/kg), sec-butylbenzene (430 ug/kg), and toluene (8,300 ug/kg). Soil samples collected from STG-1 below 1 foot bgs were not analyzed for VOCs. None of the above-referenced VOCs exceeded their respective commercial PRGs (October 2002).

# 3.4.2.2.3 Total Petroleum Hydrocarbons – Carbon Chain

Table 3 shows the detected levels of TPH organized according to carbon chain length. These data are also displayed on Figure 5. Total petroleum hydrocarbons – carbon chain (TPH-CC) were detected in 23 out of 49 boring locations tested. The TPH-CC data are summarized respective to the areas of the subject property that were investigated.

# Service Garage Area

Four borings were drilled in the Service Garage Area. Soil collected from two of the boring locations (G-4 and G-5) showed elevated TPH-CC concentrations in the one and five feet bgs soil samples. The TPH concentrations were significantly reduced or were not detected at 10 feet bgs. Total TPH-CC ranged from 11 mg/kg (G-5) to 4,500 mg/kg (G-4).

# Machine Shop Building

Eight borings were drilled in the Machine Shop Building. Only one boring (MS-1), located next to an industrial drill machine in the Machine Shop, showed concentrations of Total TPH-CC ranging from 12 mg/kg to 2,346 mg/kg at depths of 5 feet and 1 foot bgs, respectively. TPH was not detected at 10 feet bgs in boring location MS-1.

# **Fabrication Building**

Nine borings were drilled inside the Fabrication Building. Five locations in the Fabrication Building (FB-1, FB-2, FB-3, FB-4 and FB-8) showed detectable concentrations of TPH. Total TPH-CC concentrations ranged from 13 mg/kg to 84,120 mg/kg. The highest levels of TPH-CC were detected in the soil samples collected, at 1, 5, and 10 feet bgs, from FB-2 that was located adjacent to a 60-ton press in the northern portion of the building. Discolored black soil with a petroleum-like odor was in soil collected from the FB-2boring.

# **Maintenance Building**

Two borings were drilled inside of the Maintenance Building. A Total TPH-CC concentration of 300 mg/kg was detected in one soil sample (boring MB-1) collected from the Maintenance Building at a depth of one 1-foot bgs.

# **Amercoat Building**

Six borings were drilled in the former Amercoat Building. Total TPH-CC was detected at a concentration of 80 mg/kg in one soil sample (AB-4) located inside the Former Amercoat Building, at a depth of 1 -foot bgs.

#### Railroad Spur

Three borings were drilled adjacent to the railroad spur near the center of the subject property. All three locations showed Total TPH-CC concentrations ranging from 204 mg/kg to 4,904 mg/kg, at depths of 1 and 5 feet bgs. The highest detected Total TPH concentration (4,904 mg/kg) was detected at 1 foot bgs in Sample RR-10, located to the west of the former Spin Building.

#### **Septic Tank Locations**

Two borings were drilled adjacent to suspected septic tank locations. Both locations showed Total TPH-CC concentrations ranging from 31 mg/kg to 206 mg/kg (ST-2), at depths of 4 feet and 16.5 feet.

#### **AST Locations**

Six borings were drilled in former AST locations. All soil samples collected from the six locations had detectable concentrations of TPH-CC. Concentrations of total TPH-CC ranged from 95 mg/kg to 6,293 mg/kg, at depths of 1 and 5 feet bgs. The highest concentrations detected were at a location (AST-3) near the northeast portion of the subject property.

# Stripping Building

One boring, STG-1, was drilled inside of the Stripping Building. Total TPH-CC was detected at a concentrations ranging from 34,320 mg/kg (1 foot bgs) to 40,400 mg/kg (5 feet bgs) in soil samples collected from the approximately 30 feet by 30 feet area of black discolored soil. Concentrations of TPH were not detected at 10 feet bgs.

# **Hazardous Materials Storage Shed**

One boring was drilled in the Hazardous Material Storage Shed. Total TPH-CC was detected in the sample (HMS-1) at a concentration of 18 mg/kg at 1foot bgs. TPH was not detected in the soil sample collected from 5 feet bgs.

# Former Cage Building

Two borings were drilled in the former Cage Building. One (CB-2) sample collected on the south end of the former Cage Building showed Total TPH-CC concentrations ranging from 86 mg/kg to 3,950 mg/kg, at depths of 1 foot and 3 feet 8 inches bgs, respectively.

# Sump Areas

Three borings were drilled adjacent to sumps located at various locations on the subject property. TPH was detected in one (S-8) out of two samples collected from the sumps. The S-8 sump is located near the northwest corner of the former Spin Building. Detected concentrations of Total TPH-CC ranged from 14 mg/kg to 107 mg/kg at depths down to 10 feet bgs. Samples collected below 1 foot bgs were not tested for VOCs.

# 3.4.2.2.4 Polychlorinated Biphenyls

A soil sample collected from in the vicinity of a transformer (T-2), at a depth of 1 foot bgs, was analyzed for PCBs. PCBs were not detected in this sample.

### 3.4.3 Evaluation of Soil Sample Results

With the exception of arsenic, none of the CCR metals detected in the soil samples exceeded their respective Commercial PRGs. With the exception of two soil samples collected from the central railroad spur area, all of the soil samples contained arsenic concentrations within background levels (i.e., below 11 mg/kg).

One soil sample from the subject property, collected from the Stripping Building, showed detectable levels of VOCs. The VOCs detected appear related to fuel hydrocarbon products. No VOCs were detected in any of the other soil samples including those collected from the American Building area where solvent use was reported.

TPH-CC was detected at multiple locations and depths at the subject property. The most elevated TPH-CC concentrations were detected in soil samples collected from beneath: the north end of the Fabrication Building; the former historical AST areas on the north-central portion of the subject property; the central portion of the north-south oriented railroad spur, the Service Garage Building; the southern portion of the Stripping Building; and the southern portion of the Cage Building.

# 3.5 Groundwater Investigation

The collection of grab groundwater samples occurred in two phases from November 13, 2003 through December 3, 2003. A total of 14 temporary groundwater wells were installed on the subject property. In addition, one of the two deep groundwater production wells formerly used by Ameron as a water source was sampled at two depth intervals. Figure 6 presents the locations of the temporary wells and deep former production well as well as the results of VOC testing performed on the groundwater samples. The basis for the locations of groundwater sampling, sampling methodology and the results of the groundwater investigation activities are presented in Sections 3.5.1 through 3.5.3.

# 3.5.1 Rationale and Methodology

The first phase of groundwater sampling was conducted with the objective of screening groundwater beneath the subject property for the presence of VOCs, TPH and CCR metals. To achieve this, a total of seven initial grab groundwater sampling locations (HP-1 through HP-7) were selected throughout the subject property in order to provide overall coverage of site conditions. One key objective of the groundwater sampling program was to evaluate the groundwater beneath the former American Building where USTs containing solvents were suspected. In addition, groundwater samples were collected in the southeast portion of the subject property to investigate the adjacent former ARCO service station where petroleum hydrocarbon releases have affected groundwater. Figure 6 shows the locations where groundwater samples were collected. The former Ameron deep water production well is identified as AW-1 and is shown on Figure 6.

The second phase of groundwater sampling consisted of installing seven additional temporary wells and collecting grab groundwater samples (HP-8 through HP-14). The purpose of these additional groundwater samples was to help evaluate the lateral distribution of VOC constituents detected during the initial round of groundwater sampling.

All borings where groundwater sampling was conducted were installed using a hollowstem auger drilling rig equipped with an eight-inch diameter auger. During drilling of the borings, soil samples were collected at either five-foot or 10-foot intervals (see Table 2). Soil samples were collected using a standard, stainless steel, split-spoon sampler lined with brass rings. The depth at which groundwater was initially encountered was measured and recorded in the boring logs (Appendix B).

All groundwater samples were collected as grab groundwater samples. The samples were collected by gently lowering a dedicated new two-inch diameter polyethylene bailer down the inside of the auger, taking care not to excessively disturb the groundwater. Prior to collecting the sample at each boring location, the groundwater accumulated in the boring was allowed to stabilize for a period of approximately 30 minutes in order to allow the silt to settle enough to allow collection of more representative groundwater samples.

In addition to the groundwater borings, two groundwater samples, AW-1-S and AW-1-D, were collected from the former Ameron deep production well located in the north-central part of the subject property. The approximately 14-inch diameter well was sampled by lowering a clean new dedicated bailer to the depth of first encountered groundwater at 45 feet bgs. A deeper groundwater sample from the production well was collected from a depth of approximately 500 feet bgs.

#### 3.5.2 Results of Groundwater Investigations

The formal laboratory reports and chain-of custody documentation are presented in Appendix D (stand-alone bound document). Table 4 identifies the locations where the grab groundwater samples were collected (Boring ID), the sample identification number (Sample ID), the date when the soil sample was collected, and the detected concentrations. The VOC concentrations are expressed in micrograms per liter (ug/L) whereas the TPH and CCR metal concentrations are expressed in milligrams per liter (mg/L). If a specific analyte was not detected, the concentration is shown as being below the corresponding PQL for the specific analyte. The U.S. EPA Maximum Contaminant Levels (MCLs) (November 2002) for the VOC and CCR metals detected in the groundwater samples are presented in Table 4.

#### **3.5.2.1 CCR Metals**

A total of 13 of the 17 CCR metals were detected in the grab groundwater samples that were collected (Table 4). The metals beryllium, cadmium, silver, and thallium were not detected in the groundwater samples at concentrations above their respective PQLs. The 13 CCR metals detected in the groundwater samples above their respective PQLs are summarized as follows:

Antimony was detected in one groundwater sample with a concentration of 0.009 mg/L.

Arsenic was detected at concentrations ranging from 0.04 to 0.14 mg/L.

Barium was detected at concentrations ranging from 0.03 to 0.33 mg/L.

Total chromium was detected at concentrations ranging from 0.006 to 0.012 mg/L.

Cobalt was detected in two groundwater samples at concentrations of 0.003 and 0.008 mg/L.

Copper was detected at concentrations ranging from 0.009 to 0.064 mg/L.

Lead was detected in two groundwater samples at concentrations of 0.007 and 0.013 mg/L.

Mercury was detected at concentrations ranging from 0.00047 to 0.28 mg/L.

Molybdenum was detected at concentrations ranging from 0.00 7 to 0.16 mg/L.

Nickel was detected at concentrations ranging from 0.009 to 0.11 mg/L.

Selenium was detected at concentrations ranging from 0.007 to 0.39 mg/L.

Vanadium was detected at concentrations ranging from 0.003 to 0.036 mg/L.

Zinc was detected at concentrations ranging from 0.012 to 0.09 mg/L.

# 3.5.2.2 Volatile Organic Compounds

Among the 14 grab groundwater samples (excluding duplicate samples) that were collected from the temporary wells, eight groundwater samples (HP-2W, HP-4W, HP-7W, HP-8W, HP-10W, HP-11W, HP-12W, and HP-13W) contained detectable concentrations of VOCs above their respective PQLs. A total of 11 VOCs were detected. In addition, three VOCs were detected in the deep groundwater sample (AW-1-D) collected from the former Ameron production well. The MCLs for the detected VOCs are presented on Table 4.

Benzene was detected in samples HP-8W, HP-10W, HP-11W, and HP-12W at concentration ranging from 2.1 to  $13 \mu g/L$ .

Trichloroethene (TCE) was detected in groundwater samples from borings HP-2 and HP-7 and in the sample collected from the deeper portion of the former Ameron production well (AW-1D). The TCE concentrations were 6.2, 25 and 130  $\mu$ g/L in groundwater samples AW-1D, HP-2W and HP-7W, respectively.

Vinyl chloride was detected in only one sample (HP-8W) at a concentration of 0.5 µg/L.

1,1-Dichloroethene (1,1-DCE) was detected in samples HP-8W, HP-10W, HP-11W, HP-12W, HP-13W and AW-1D. Concentrations of 1,1-DCE ranged from 0.71 (HP-13W) to 8.7 µg/L (HP-10W).

Cis-1,2-dichloroethene (cis-1,2-DCE)was detected in samples HP-2W and HP-7W at concentrations of 8.2 and 12 µg/L, respectively.

Trans-1,2–dichloroethene (trans-1,2-DCE) was detected in samples HP-2W and AW-1 at concentrations of 8.7  $\mu$ g/L and 1.1  $\mu$ g/L, respectively.

Bromodichloromethane was detected only in sample HP-4W at a concentration of  $0.67 \, \mu \text{g/L}$ .

Dibromochloromethane was detected in samples HP-4W and HP-10W at concentrations of 1.5  $\mu$ g/L and 0.57  $\mu$ g/L, respectively.

Bromoform was detected in samples HP-4W and HP-10W at concentrations of 3.2 and  $2.2 \mu g/L$ , respectively.

Tert-Butanol was detected in samples HP-11W and HP-12W at concentrations of 150  $\mu$ g/L and 290  $\mu$ g/L, respectively.

Di-Ispopropyl Ether was detected in samples HP-8W, HP-11W and HP-12W at concentrations of 0.89  $\mu$ g/L, 1.5  $\mu$ g/L and 0.59  $\mu$ g/L, respectively.

# 3.5.2.3 Total Petroleum Hydrocarbons (TPH)

Gasoline range TPH was not detected in any of the grab groundwater samples above the PQLs.

Diesel range TPH was detected in seven of the 14 groundwater wells sampled. The diesel range TPH concentrations ranged from 0.27 mg/L to 0.55 mg/L.

Diesel range TPH was also detected in the shallow (AW-1-S) and deep (AW-1-D) groundwater samples collected from the former Ameron production well at concentrations of 3.1 and 0.97 mg/L, respectively.

#### 3.5.3 Evaluation of Results

The groundwater beneath the subject property is not used as a source of potable water. However, in accordance with common practice in California, the groundwater data were compared to the US EPA MCLs established for drinking water.

The metals that exceeded their corresponding MCLs in multiple groundwater samples were arsenic, mercury, nickel, and selenium.

Benzene, TCE, 1,1-DCE, and cis-1,2-DCE were detected at concentrations that exceeded their corresponding MCLs.

Gasoline range-TPH was not detected in the groundwater samples. Diesel-range TPH was present in some of the groundwater samples.

#### 4.0 LIMITATIONS

This report has been prepared exclusively for the Overton Moore Properties. The information contained herein is only valid as of the date of the report. While the work was intended describe the Phase II investigative activities performed at the subject property, Overton Moore Properties should recognize that this report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited soil vapor, soil, and grab groundwater sampling and laboratory analyses performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein.

Therefore, the report should only be deemed conclusive with respect to the information obtained. No guarantee or warranty of the results of the report is implied within the intent of this report or any subsequent reports, correspondence or consultation, either expressed or implied. Premier strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.



Source:

USGS, 1978

South Gate, California Quadrangle

7.5-minute (topographic) series

Photorevised 1981

Scale: 1'' = 2000 ft (1:24,000)

1 mile 0.5

Figure 1. Site Location Map, Ameron Facility, 4635 Firestone Boulevard, South Gate, California



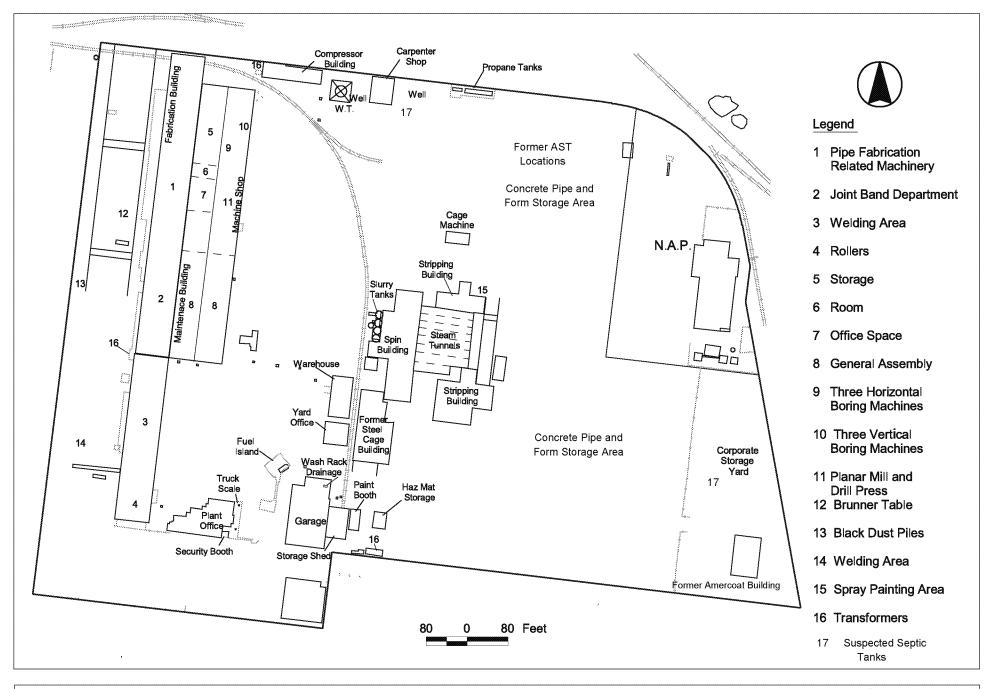
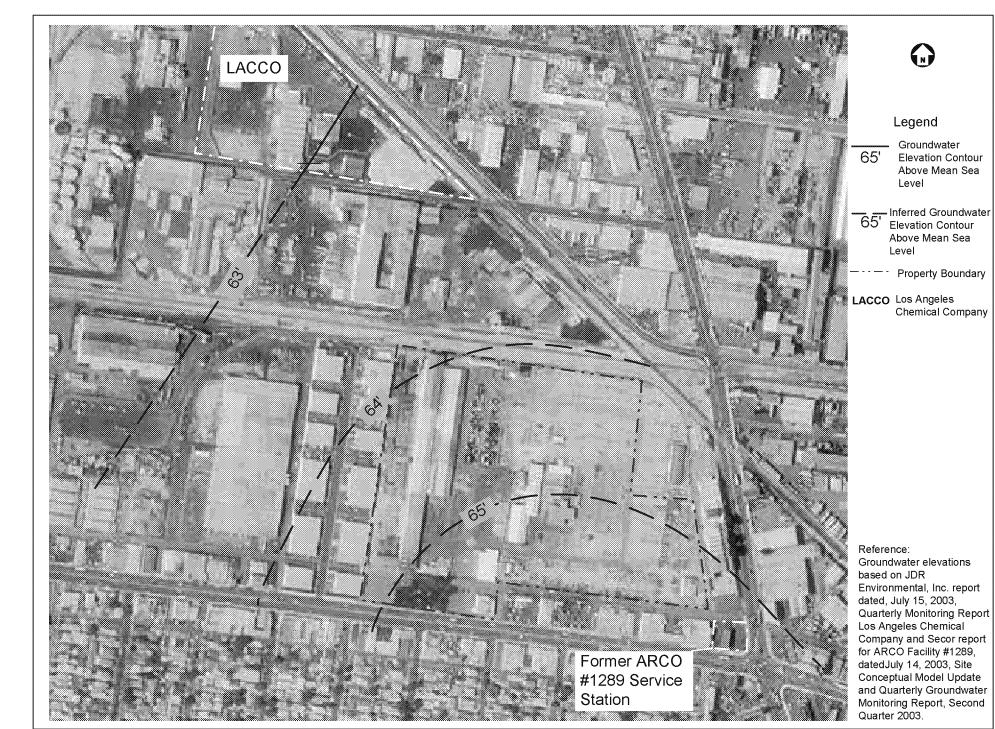


Figure 2. Generalized Site Plan - Ameron Facility, South Gate, California







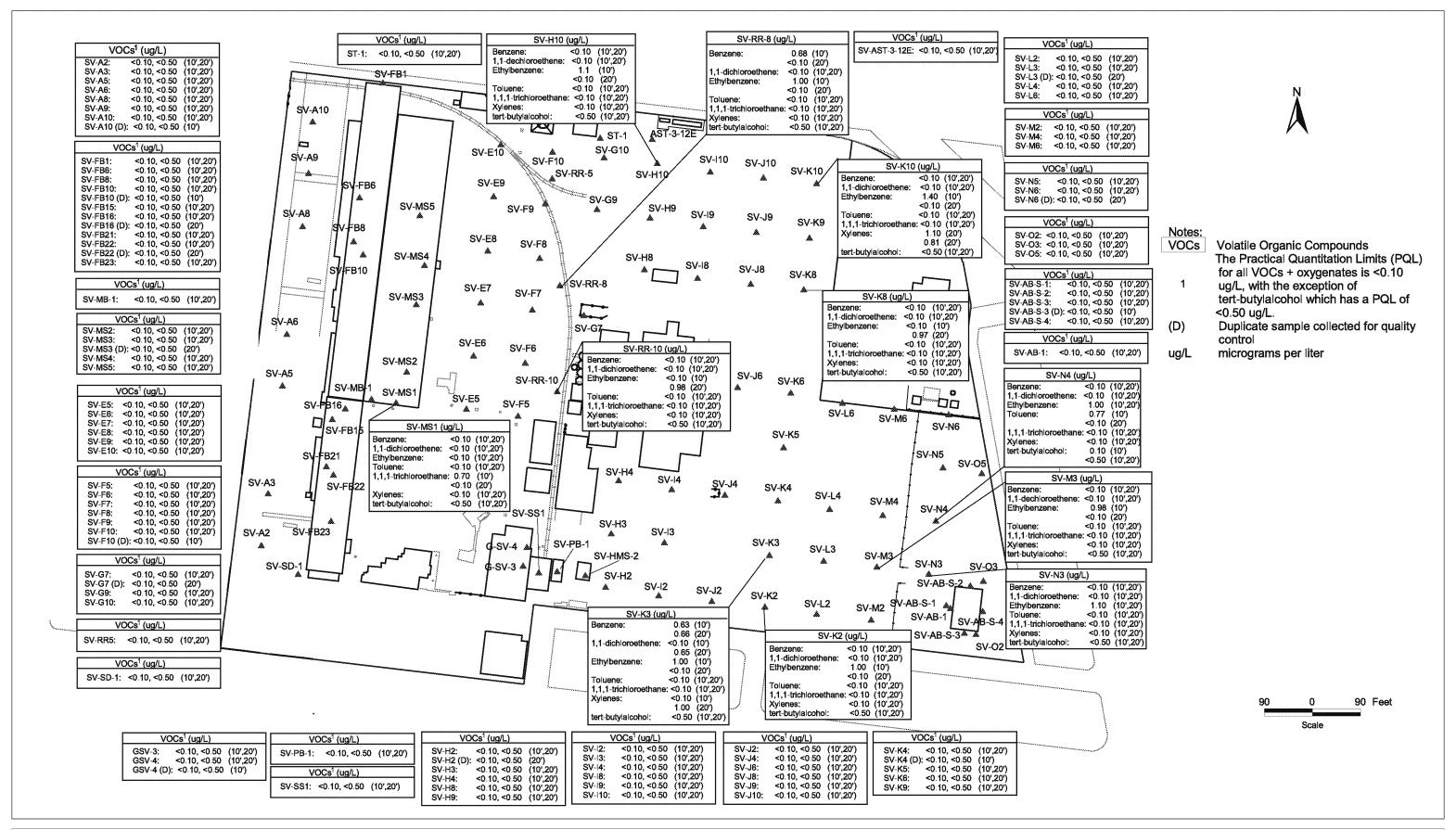
Legend Groundwater

Level

Elevation Contour Above Mean Sea

Property Boundary

Figure 3. Interpreted Groundwater Elevation Map Based on Neighboring Property Data



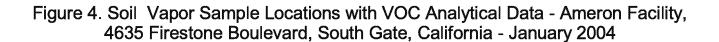
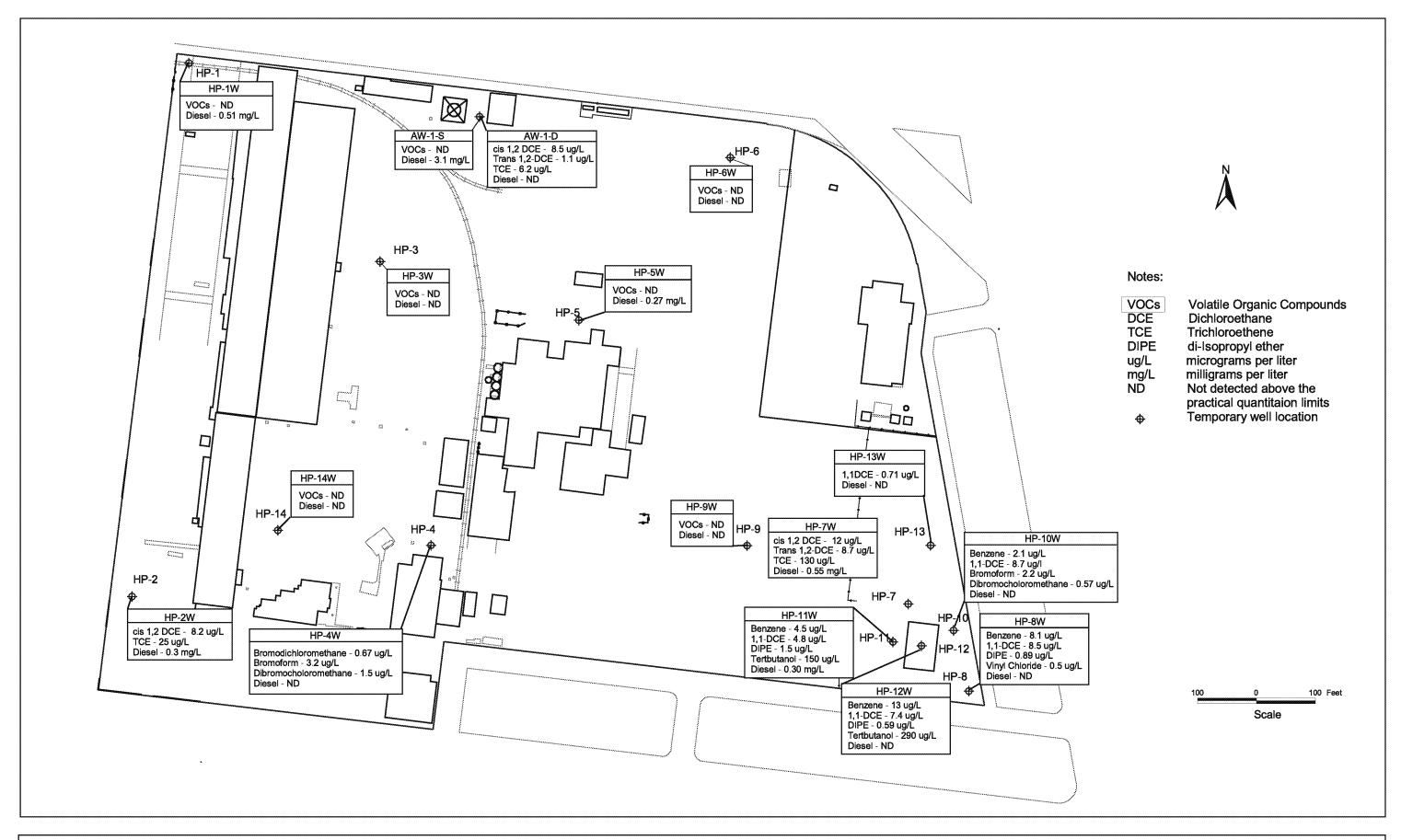








Figure 5. Soil Sample Locations with TPH-CC, PCBs, and VOCs Analytical Results - Ameron Facility, 4635 Firestone Boulevrd, South Gate, California - January 2004



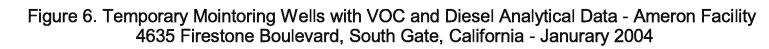




Table 1
Summay of Analytical Test Data for Detectable VOCs<sup>1</sup> in Soil Vapor Samples
Ameron International Facility

				South Gate,	California	У			
					ed Volatile Or	ganic Compou and 8260B + Ox	` ,	n ug/L	
Boring ID	Sample ID	Date Sampled	Benzene	1,1-Dichloroethene	Ethylbenzene	Toluene	1,1,1-Trichloroethane	Xylenes	tert-Butylalcohol
SV-H10	SV-H10-10'	11/18/03	<0.10	<0.10	1.10	<0.10	<0.10	<0.10	<0.50
	SV-H10-20'		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
SV-K2	SV-K2-10'	11/18/03	<0.10	<0.10	1.00	<0.10	<0.10	<0.10	<0.50
	SV-K2-20'		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
SV-K3	SV-K3-10'	11/18/03	0.63	<0.10	1.00	<0.10	<0.10	<0.10	<0.50
	SV-K3-20'		0.66	0.65	<0.10	<0.10	<0.10	1.00	<0.50
SV-K8	SV-K8-10'	11/17/03	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
	SV-K8-20'		<0.10	<0.10	0.97	<0.10	<0.10	<0.10	<0.50
SV-K10	SV-K10-10'	11/17/03	<0.10	<0.10	1.40	<0.10	<0.10	1.10	<0.50
	SV-K10-20'		<0.10	<0.10	<0.10	<0.10	<0.10	0.81	<0.50
SV-M3	SV-M3-10'	11/18/03	<0.10	<0.10	0.98	<0.10	<0.10	<0.10	<0.50
	SV-M3-20'		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
SV-N3	SV-N3-10'	11/17/03	<0.10	<0.10	1.10	<0.10	<0.10	<0.10	<0.50
	SV-N3-20'		<0.10	<0.10	1.10	<0.10	<0.10	<0.10	<0.50
SV-N4	SV-N4-10'	11/17/03	<0.10	<0.10	<0.10	0.77	<0.10	<0.10	0.10
	SV-N4-20'		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
SV-MS-1	SV-MS-1-10'	11/19/03	<0.10	<0.10	<0.10	<0.10	0.70	<0.10	<0.50
	SV-MS-1-20'		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
SV-RR8	SV-RR8-10'	11/19/03	0.68	<0.10	1.00	<0.10	<0.10	<0.10	<0.50
	SV-RR8-20'		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
SV-RR10	SV-RR10-10'	11/19/03	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
	SV-RR10-20'		<0.10	<0.10	0.98	<0.10	<0.10	<0.10	<0.50
Metho	ode Detection Li	mits	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50

**Explanation and Notes:** 

<sup>&</sup>lt;sup>1</sup> VOCs - Volatile Organic Compounds - Only soil vapor samples that had detectable concentrations of VOCs are displayed Bold data represent exceedences of Method Detection Limits ug/L micrograms per liter

Table 2
Summay of Analytical Test Data for CCR Metals<sup>1</sup> in Soil Samples
Ameron International Facility
South Gate, California

								D			ls in mg/l 0A/7471)	√g					
Boring ID	Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Thallium (TI)	Vanadium (V)	Zinc (Zn)
G-2	SS-G-2-1'	12/4/2003	<1.0	2.8	120	<1.0	13	9.5	19	3.0	<1.0	<1.0	10	<1.0	<1.0	34	48
	SS-G-2-5'		<1.0	17	110	<1.0	12	8.5	18	22	<1.0	<1.0	8.5	<1.0	<1.0	30	63
Annananananananananananan	SS-G-2-10'		<1.0	2.4	100	<1.0	11	8.0	16	4.0	<1.0	<1.0	8.5	<1.0	<1.0	30	42
G-3	SS-G-3-1'	12/5/2003	<1.0	3.8	130	<1.0	30	12	22	3.5	<1.0	<1.0	12	<1.0	<1.0	47	58
***************************************	SS-G-3-5'		<1.0	2.8	84	<1.0	14	8.5	12	2.5	<1.0	<1.0	8.0	<1.0	<1.0	38	41
	SS-G-3-10'	10/0/0002	<1.0	2.8	74	<1.0	21	8.0	12	1.5	<1.0	<1.0	7.5	<1.0	<1.0	36	39
<u>G-4</u>	SS-G-4-1'	12/2/2003	1.0	5.7	88	<1.0	19	5.0	30	23	0.17	1.5	14	<1.0	<1.0	24	56
	SS-G-4-5'		<1.0	5.0	100	<1.0	20	7.0	26	16	<1.0	1.5	13	<1.0	<1.0	30	57
0.5	SS-G-4-10'	12/5/2002	<1.0	1.5	51	<1.0	7.5	5.0	7.5	1.0	<1.0	1.5	4.5	<1.0	<1.0	19	<u>26</u>
G-5	SS-G-5-1'	12/5/2003	<1.0	3	110	<1.0	12	7.5	22	7.5	<1.0	<1.0	9.0	<1.0	<1.0	27	53
	SS-G-5-5' SS-G-5-10'		<1.0	3.2	120	<1.0 <1.0	16	9.5	22	3.5	<1.0	1.0	12	<1.0	<1.0	36	<del>50</del> 46
PB-1	SS-B-1-1'	12/4/2003	<1.0	3.0 4.5	100	<1.0	13	9.5	20 29	4.0	<1.0	3.0	10 16	<1.0	<1.0	48	64
	SS-PB-1-5°	12/4/2003	<1.0	1.4	160 44	<1.0	5.0	4.0	6.5	17	<1.0	<1.0	3.5	<1.0	<1.0	18	22
MS-1	SS-MS-1-1'	12/5/2003	1.0	9.7	120	<1.0	18	7.0	100	55	<1.0	1.5	21	<1.0	<1.0	21	82
1710-1	SS-MS-1-5°	12/3/2003	<1.0	1.3	46	<1.0	5.0	4.0	5.5	1.0	<1.0	<1.0	3.0	<1.0	<1.0	20	22
	SS-MS-1-10'		<1.0	2.2	76	<1.0	25	7.0	15	1.5	<1.0	3.5	32	<1.0	<1.0	26	36
MS-2	SS-MS-2-1'	12/5/2003	<1.0	2.7	110	<1.0	14	9.5	18	3.0	<1.0	<1.0	10	<1.0	<1.0	34	51
	SS-MS-2-5'		<1.0	1.1	58	<1.0	5.5	5.0	6.5	1.0	<1.0	<1.0	4.0	<1.0	<1.0	18	27
	SS-MS-2-10'		<1.0	1.6	45	<1.0	5.0	4.5	6.0	1.0	<1.0	<1.0	3.0	<1.0	<1.0	19	22
MS-3	SS-MS-3-1'	12/5/2003	<1.0	3.7	120	<1.0	18	12	20	3.5	<1.0	<1.0	12	<1.0	<1.0	47	55
***************************************	SS-MS-3-5'		<1.0	2.7	56	<1.0	12	7.5	11	1.0	<1.0	<1.0	6.5	<1.0	<1.0	40	36
	SS-MS-3-10'		<1.0	4.1	100	1.8	18	12	24	3.0	<1.0	<1.0	12	<1.0	<1.0	52	50
MS-4	SS-MS-4-1'	12/5/2003	<1.0	2.4	100	<1.0	13	9.0	16	2.5	<1.0	<1.0	9.0	<1.0	<1.0	32	46
***************************************	SS-MS-4-5'		<1.0	<1.0	45	<1.0	4.5	4.5	5.5	1.0	<1.0	<1.0	3.0	<1.0	<1.0	16	22
	SS-MS-4-10°		<1.0	2.8	130	<1.0	13	10	16	2.0	<1.0	<1.0	9.5	<1.0	<1.0	37	49
N	Method Detection	n Limits	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table 2
Summay of Analytical Test Data for CCR Metals<sup>1</sup> in Soil Samples
Ameron International Facility
South Gate, California

								D			ls in mg/l 0A/7471)	≺g					
Boring ID	Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Thallium (TI)	Vanadium (V)	Zinc (Zn)
MS-5	SS-MS-5-1'	12/5/2003	<1.0	3.4	84	1.6	14	22	19	3.5	<1.0	<1.0	10	<1.0	<1.0	44	46
	SS-MS-5-5'		<1.0	2.2	58	1.0	8.0	7.5	10	1.0	<1.0	<1.0	6.0	<1.0	<1.0	31	32
	SS-MS-5-10'		2.6	2.6	69	<1.0	12	8.0	12	1.5	<1.0	<1.0	7.0	<1.0	<1.0	38	38
MS-6	SS-MS-6-1'	12/5/2003	<1.0	1.3	56	<1.0	5.5	5.0	8.0	1.5	<1.0	<1.0	4.0	<1.0	<1.0	17	29
	SS-MS-6-5°		<1.0	2.8	150	<1.0	16	10	25	4.0	<1.0	<1.0	13	<1.0	<1.0	35	56
	SS-MS-6-10'		<1.0	1.3	64	<1.0	7.5	6.0	9.0	1.0	0.17	<1.0	5.5	<1.0	<1.0	22	34
MS-7	SS-MS-7-1'	12/5/2003	<1.0	2.0	50	<1.0	8.5	6.5	8.0	1.0	<1.0	<1.0	5.0	<1.0	<1.0	30	28
	SS-MS-7-5°		<1.0	3.5	110	<1.0	17	10	18	3.0	<1.0	<1.0	10	<1.0	<1.0	41	52
	SS-MS-7-10°		<1.0	3.7	100	<1.0	20	9.5	16	2.5	<1.0	<1.0	9.5	<1.0	<1.0	42	47
MS-8	SS-MS-8-1'	12/5/2003	<1.0	2.5	77	<1.0	12	7.5	12	2.0	<1.0	<1.0	7.0	<1.0	<1.0	33	39
	SS-MS-8-5'		<1.0	1.5	50	<1.0	5.5	4.5	5.5	1.0	<1.0	<1.0	3.0	<1.0	<1.0	19	22
	SS-MS-8-10°		<1.0	4.5	130	<1.0	22	12	25	3.5	<1.0	<1.0	14	<1.0	<1.0	56	59
FB-1	SS-FB-1-1'	12/4/2003	<1.0	4.0	150	<1.0	19	12	22	4.0	<1.0	<1.0	14	<1.0	<1.0	43	63
	SS-FB-1-5'		<1.0	2.3	83	<1.0	10	7.5	12	2.0	<1.0	<1.0	7.0	<1.0	<1.0	29	40
	SS-FB-1-10'		<1.0	2.5	75	<1.0	11	7.5	12	2.0	<1.0	<1.0	7.0	<1.0	<1.0	29	40
FB-2	SS-FB-2-1'	12/5/2003	<1.0	2.8	110	<1.0	14	10	20	7.0	<1.0	<1.0	12	<1.0	<1.0	34	52
	SS-FB-2-5°		<1.0	3.4	130	<1.0	18	12	25	5.5	<1.0	<1.0	14	<1.0	<1.0	44	63
***************************************	SS-FB-2-10°		<1.0	1.7	58	<1.0	8.5	6.0	9.0	2.0	<1.0	<1.0	5.5	<1.0	<1.0	24	32
FB-3	SS-FB-3-1'	12/2/2003	<1.0	3.7	140	<1.0	17	11	22	11	<1.0	<1.0	13	<1.0	<1.0	39	76
	SS-FB-3-5°		<1.0	3.2	130	<1.0	16	10	20	4.5	<1.0	<1.0	12	<1.0	1.0	40	58
***************************************	SS-FB-3-10°		<1.0	2.8	86	<1.0	16	8.5	16	5.5	<1.0	<1.0	11	<1.0	<1.0	30	52
FB-3d	SS-FB-3d-1	12/4/2003	<1.0	2.4	100	<1.0	12	8.5	15	2.5	<1.0	<1.0	8.5	<1.0	<1.0	31	44
	SS-FB-3d-5°		<1.0	3.7	150	<1.0	19	12	28	4.5	0.13	1.5	14	<1.0	<1.0	44	59
FB-4	SS-FB-4-10'	12/4/2003	<1.0	1.7	54	<1.0	6.0	5.0	8.0	1.5	<1.0	<1.0	5.0	<1.0	<1.0	19	27
***************************************	SS-FB-4-15'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SS-FB-4-20'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FB-5	SS-FB-5-1'	12/5/2003	1.5	10	57	<1.0	88	16	96	15	<1.0	4.0	20	49	1.5	<1.0	<1.0
N	Method Detection	Limits	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table 2
Summay of Analytical Test Data for CCR Metals<sup>1</sup> in Soil Samples
Ameron International Facility
South Gate, California

								De	etected C (EPA Me		ls in mg/l 0A/7471)	≺g					
Boring ID	Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Thallium (Tl)	Vanadium (V)	Zinc (Zn)
FB-6	SS-FB-6-3°	12/5/2003	<1.0	1.2	53	<1.0	6.5	5.5	7.5	1.0	<1.0	<1.0	4.0	<1.0	<1.0	22	30
	SS-FB-6-5'		<1.0	<1.0	43	<1.0	4.0	4.0	5.0	1.0	<1.0	<1.0	3.0	<1.0	<1.0	16	20
	SS-FB-6-10'		<1.0	1.8	58	<1.0	8.5	6.0	10	1.5	<1.0	<1.0	5.5	<1.0	<1.0	24	31
FB-8	SS-FB-8-1'	12/5/2003	<1.0	2.7	110	<1.0	14	9.5	18	3.0	<1.0	<1.0	10	<1.0	<1.0	32	50
	SS-FB-8-5'		<1.0	1.4	60	<1.0	6.5	5.5	8.5	1.0	<1.0	<1.0	4.5	<1.0	<1.0	20	31
	SS-FB-8-10'		<1.0	3.1	130	<1.0	16	10	24	3.5	<1.0	1.5	12	<1.0	<1.0	36	53
FB-9	SS-FB-9-1'	12/5/2003	<1.0	2.0	82	<1.0	9.0	7.0	14	2.5	<1.0	<1.0	7.0	<1.0	<1.0	25	38
	SS-FB-9-5'		<1.0	1.0	56	<1.0	6.0	5.0	7.0	1.0	<1.0	<1.0	4.0	<1.0	<1.0	18	26
***************************************	SS-FB-9-10'		<1.0	2.2	74	<1.0	11	8.0	12	2.0	<1.0	<1.0	7.0	<1.0	<1.0	31	42
MB-1	SS-MB-1-1'	12/4/2003	<1.0	8.0	160	<1.0	21	12	36	5.5	<1.0	<1.0	18	<1.0	<1.0	43	57
MB-2	SS-MB-2-1'	12/4/2003	<1.0	6.7	130	<1.0	18	10	29	4.0	0.1	<1.0	15	<1.0	<1.0	37	48
AB-1	SS-AB-1-1'	12/5/2003	<1.0	2.8	88	<1.0	16	8.0	13	4.5	<1.0	<1.0	9.0	<1.0	<1.0	34	42
	SS-AB-1-5'		<1.0	3.7	100	<1.0	16	10	16	2.0	<1.0	<1.0	10	<1.0	<1.0	42	49
	SS-AB-1-10'		<1.0	3.5	120	<1.0	20	11	18	3.0	<1.0	<1.0	12	<1.0	<1.0	45	58
	SS-AB-1-15'		<1.0	2.8	98	<1.0	16	10	18	2.0	<1.0	<1.0	9.0	<1.0	<1.0	44	50
	SS-AB-1-20°		<1.0	3.9	120	<1.0	18	12	26	3.0	0.1	<1.0	12	<1.0	1.0	56	58
AB-2	SS-AB-2-1'	12/5/2003	<1.0	3.0	98	<1.0	16	10	18	3.0	<1.0	<1.0	10	<1.0	<1.0	42	47
	SS-AB-2-5°		<1.0	2.9	96	<1.0	16	10	16	2.5	<1.0	<1.0	10	<1.0	<1.0	44	48
	SS-AB-2-10°		<1.0	3.2	110	<1.0	18	11	16	2.0	<1.0	<1.0	11	<1.0	<1.0	44	54
	SS-AB-2-15'		<1.0	5.6	120	<1.0	18	12	19	2.5	<1.0	<1.0	11	<1.0	<1.0	49	57
	SS-AB-2-20°		<1.0	2.9	130	<1.0	20	14	22	3.0	<1.0	<1.0	13	<1.0	<1.0	54	64
AB-3	SS-AB-3-1'	12/5/2003	<1.0	3.7	120	<1.0	18	10	23	5.5	<1.0	<1.0	11	<1.0	<1.0	48	54
	SS-AB-3-5'		<1.0	2.5	76	<1.0	14	8.5	12	1.5	<1.0	<1.0	8.5	<1.0	<1.0	40	41
***************************************	SS-AB-3-10'		<1.0	2.9	100	<1.0	16	10	15	2.0	<1.0	<1.0	10	<1.0	<1.0	40	50
	SS-AB-3-15°		<1.0	3.6	130	<1.0	20	12	20	2.5	<1.0	<1.0	12	<1.0	<1.0	50	62
	SS-AB-3-20°		<1.0	3	99	<1.0	21	10	18	2.0	<1.0	1.0	15	<1.0	<1.0	45	50
AB-4	SS-AB-4-1'	12/5/2003	<1.0	3.5	99	<1.0	11	7.0	18	8.0	14	<1.0	8.5	<1.0	<1.0	26	64
N	Method Detection	Limits	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table 2
Summay of Analytical Test Data for CCR Metals<sup>1</sup> in Soil Samples
Ameron International Facility
South Gate, California

								D	etected C (EPA Me		ls in mg/l 0A/7471)	≺g					
Boring ID	Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Thallium (TI)	Vanadium (V)	Zinc (Zn)
	SS-AB-4-5'		<1.0	2.2	74	<1.0	10	7.0	11	2.0	<1.0	<1.0	7.0	<1.0	<1.0	26	36
	SS-AB-4-10°		<1.0	2.3	90	<1.0	12	8.0	12	2.0	<1.0	<1.0	8.5	<1.0	<1.0	28	44
	SS-AB-4-15°		<1.0	2.6	96	<1.0	16	8.5	23	1.0	<1.0	<1.0	9.0	<1.0	<1.0	38	44
	SS-AB-4-20°		<1.0	3.4	140	<1.0	19	12	21	4.0	<1.0	<1.0	13	<1.0	<1.0	44	63
AB-5	SS-AB-5-1'	12/5/2003	2.5	2.8	67	<1.0	8.5	5.5	8.0	6.5	<1.0	<1.0	5.5	<1.0	<1.0	24	32
***************************************	SS-AB-5-5'		<1.0	2.2	80	<1.0	12	7.0	12	5.5	<1.0	<1.0	8.5	<1.0	<1.0	26	38
	SS-AB-5-10'		<1.0	2.5	93	<1.0	14	9.0	13	2.0	<1.0	<1.0	9.5	<1.0	<1.0	33	48
	SS-AB-5-15'		<1.0	5.2	150	<1.0	18	11	29	4.0	<1.0	1.0	14	<1.0	<1.0	41	58
***************************************	SS-AB-5-20°	***************************************	<1.0	3.5	130	<1.0	18	11	30	5.5	<1.0	<1.0	12	<1.0	<1.0	48	58
AB-6	SS-AB-6-1'	12/5/2003	<1.0	2.2	62	1.1	9.5	6.5	10	1.5	<1.0	<1.0	6.0	<1.0	<1.0	30	30
	SS-AB-6-5'		<1.0	2.3	48	<1.0	9.0	7.0	9.5	1.5	<1.0	<1.0	6.0	<1.0	<1.0	30	30
	SS-AB-6-10'	***************************************	<1.0	2.1	37	<1.0	9.5	5.0	8.0	1.0	0.12	<1.0	5.0	<1.0	<1.0	32	24
	SS-AB-6-15'		1.0	4.3	98	<1.0	16	12	18	3.0	<1.0	<1.0	12	<1.0	1.0	43	54
	SS-AB-6-20°		<1.0	2.3	52	<1.0	11	6.0	9.0	1.5	<1.0	<1.0	6.5	<1.0	<1.0	27	28
RR-6	SS-RR-6-1'	12/2/2003	1.5	82	90	<1.0	34	10	110	28	0.19	5.5	33	<1.0	<1.0	33	73
	SS-RR-6-5°		<1.0	4.8	100	<1.0	15	9.0	18	2.5	<1.0	5.5	9.5	<1.0	<1.0	42	48
RR-8	SS-RR-8-1'	12/2/2003	<1.0	8.1	110	<1.0	37	6.5	34	35	<1.0	76	28	<1.0	<1.0	30	86
	SS-RR-8-5°		1.0	40	120	<1.0	22	6.5	38	60	<1.0	2.0	15	<1.0	<1.0	29	140
RR-10	SS-RR-10-1	12/2/2003	<1.0	3.0	66	<1.0	10	5.0	11	2.5	<1.0	1.5	16	<1.0	<1.0	40	29
	SS-RR-10-5'		<1.0	3.6	66	<1.0	9.5	5.5	12	7.0	<1.0	<1.0	9.0	<1.0	<1.0	24	42
SB-1	SS-SB-1-1'	12/2/2003	<1.0	2.5	62	<1.0	12	4.0	17	44	<1.0	1.0	10	<1.0	<1.0	18	320
SB-3	SS-SB-3-1'	12/3/2003	<1.0	2.2	96	<1.0	9.5	8.5	18	3.0	<1.0	1.0	8.5	<1.0	<1.0	26	44
SB-4	SS-SB-4-1'	12/3/2003	<1.0	2.0	78	<1.0	9.0	7.0	13	4.0	0.2	<1.0	7.5	<1.0	<1.0	24	39
ST-1	SS-ST-1-11.5°	12/2/2003	<1.0	3.7	120	<1.0	16	10	20	4.0	<1.0	1.0	10	<1.0	<1.0	40	55
	SS-ST-1-16.5°		<1.0	3.8	110	<1.0	15	8.0	20	11	<1.0	1.0	10	<1.0	<1.0	32	62
ST-2	SS-ST-2-4'	12/3/2003	<1.0	2.6	91	<1.0	12	8.5	17	3.5	<1.0	<1.0	9.0	<1.0	<1.0	30	44
_	SS-ST-2-9'		<1.0	2.4	130	<1.0	15	11	18	2.5	<1.0	<1.0	12	<1.0	<1.0	36	58
]	Method Detection	Limits	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table 2
Summay of Analytical Test Data for CCR Metals<sup>1</sup> in Soil Samples
Ameron International Facility
South Gate, California

								D			ls in mg/l 0A/7471)	≺g					
Boring ID	Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Thallium (TI)	Vanadium (V)	Zinc (Zn)
AST-1	SS-AST-1-1	12/2/2003	<1.0	2.9	80	<1.0	10	6.0	17	4.5	<1.0	<1.0	7.5	<1.0	<1.0	23	39
	SS-AST-1-5		<1.0	2.9	72	<1.0	8.5	4.5	13	2.5	<1.0	<1.0	7.0	<1.0	<1.0	16	740
AST-3	SS-AST-3-1'	12/2/2003	<1.0	5	110	<1.0	14	7.0	22	15	<1.0	1.5	17	<1.0	<1.0	32	46
	SS-AST-3-5°		<1.0	5.8	98	<1.0	12	5.5	16	6.5	<1.0	1.0	10	<1.0	<1.0	25	52
AST-5	SS-AST-5-1	12/2/2003	<1.0	5.4	120	<1.0	14	7.0	22	13	<1.0	1.0	17	<1.0	<1.0	33	43
	SS-AST-5-5'		<1.0	3.6	130	<1.0	16	9.0	18	8.0	<1.0	<1.0	12	<1.0	<1.0	34	57
AST-6	SS-AST-6-1'	12/2/2003	24	5.5	110	<1.0	15	7.0	29	12	<1.0	<1.0	11	<1.0	<1.0	29	71
	SS-AST-6-5		2.5	4.2	84	<1.0	10	6.0	21	16	<1.0	<1.0	8.0	<1.0	<1.0	20	60
AST-7	SS-AST-7-1	12/2/2003	<1.0	10	86	<1.0	11	6.5	39	9.5	<1.0	<1.0	14	<1.0	<1.0	30	42
	SS-AST-7-5		1.0	3.4	92	<1.0	19	7.5	18	8.5	<1.0	1.0	14	<1.0	<1.0	34	52
AST-8	SS-AST-8-1'	12/2/2003	<1.0	3.3	90	<1.0	8.5	5.0	22	11	<1.0	1.0	6.0	<1.0	<1.0	18	46
	SS-AST-8-5		<1.0	5.8	120	<1.0	18	8.0	31	20	<1.0	1.5	12	<1.0	<1.0	32	74
T-2 <sup>2</sup>	SS-T-2-1'		NA <sup>3</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STG-1	SS-STG-1-1	12/5/2003	<1.0	3.8	92	<1.0	14	10	24	24	<1.0	<1.0	18	<1.0	<1.0	29	290
	SS-STG-1-5'		<1.0	3.0	100	<1.0	14	9.5	18	3.0	1.0	<1.0	10	<1.0	<1.0	31	49
	SS-STG-1-10°		<1.0	2.1	80	<1.0	9.5	7.0	12	1.5	<1.0	<1.0	6.5	<1.0	<1.0	26	35
HMS-1	SS-HMS-1-1'	12/5/2003	<1.0	3.2	110	<1.0	16	10	22	3.5	<1.0	<1.0	12	<1.0	<1.0	38	50
	SS-HMS-1-5°		<1.0	<1.0	32	<1.0	3.5	3.0	5.0	1.0	<1.0	<1.0	2.5	<1.0	<1.0	14	17
SP-2	SS-SP-2-3'	12/4/2003	<1.0	2.1	86	<1.0	10	8.0	11	1.5	<1.0	<1.0	7.5	<1.0	<1.0	29	40
	SS-SP-2-8'		<1.0	2.9	99	<1.0	14	9.5	18	3.0	<1.0	<1.0	10	<1.0	<1.0	36	48
	SS-SP-2-13°		<1.0	2.2	78	<1.0	9.5	7.5	10	1.5	<1.0	<1.0	7.0	<1.0	<1.0	28	38
CB-1	SS-CB-1-1'	12/3/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SS-CB-1-5°		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CB-2	SS-CB-2-1'	12/3/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SS-CB-2-3'8"		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-2	SS-S-2-5°	12/4/2003	<1.0	2.2	84	<1.0	9.0	7.5	12	1.5	<1.0	<1.0	7.0	<1.0	<1.0	25	39
	SS-S-2-10°		<1.0	3.3	54	<1.0	7.5	6.0	9.5	1.0	<1.0	<1.0	5.5	<1.0	<1.0	22	32
N	Method Detection	Limits	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Table 2
Summay of Analytical Test Data for CCR Metals<sup>1</sup> in Soil Samples
Ameron International Facility
South Gate, California

								o, oann									
								De			ls in mg/l 0A/7471)	⟨g					
Boring ID	Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Thallium (TI)	Vanadium (V)	Zinc (Zn)
S-8	SS-S-8-1'		<1.0	4.1	74	<1.0	10	3.5	36	69	<1.0	<1.0	10	<1.0	<1.0	13	64
	SS-S-8-5°		<1.0	2.4	76	<1.0	7.0	4.0	10	4.0	<1.0	<1.0	5.5	<1.0	<1.0	20	26
	SS-S-8-10°		<1.0	2.2	100	<1.0	9.5	7.0	16	3.0	<1.0	<1.0	8.0	<1.0	<1.0	26	36
GC-1	SS-GC-1-5'	12/4/2003	<1.0	1.9	76	<1.0	8.0	6.5	11	2.0	<1.0	6.0	<1.0	<1.0	<1.0	23	34
	SS-GC-1-10'		<1.0	1.6	64	<1.0	7.0	6.5	9.0	1.5	<1.0	<1.0	5.5	<1.0	<1.0	22	32
V-1	SS-V-1-5'	12/4/2003	<1.0	1.3	59	<1.0	5.0	5.0	7.0	1.0	<1.0	<1.0	4.0	<1.0	<1.0	17	27
***************************************	SS-V-1-10'		<1.0	2.1	78	<1.0	8.5	6.5	12	2.0	<1.0	<1.0	7.0	<1.0	<1.0	24	34
N	Method Detection	n Limits	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

## Explanation and Notes:

Bold values represent exceedences of Method Detection Limits

mg/Kg milligrams per kilogram

<sup>&</sup>lt;sup>1</sup> CCR Metals - The 17 metals listed in the California Code of Regulations, Title 22, Article 11.

<sup>&</sup>lt;sup>2</sup> Sample was only analyzed for polychlorinated biphenyls and was non-detect

NA - Sample not Analyzed.

Table 3
Summay of Analytical Test Data for VOCs<sup>1</sup> and TPH-CC<sup>2</sup> in Soil Samples
Ameron International Facility
South Gate, California

						Volat	ile Organ (E	ic Compo EPA Meth			ug/Kg		Tota			c) in mg/l		Chain
Boring ID	Sample ID	Date Sampled	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	4-Isopropyltoluene	Ethylbenzene	m,p-Xylene	o-Xylene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Toluene	C5-C12	C10-C12	C13-C15	C16-C22	C23-C32	>632
G-2	SS-G-2-1'	12/04/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-G-2-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-G-2-10' SS-G-3-1'	12/05/03	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<5 <5	<1.0 <1.0	<10	<10	<10 <10	<10 <10	<10 <10
<u>U-3</u>	SS-G-3-5'	12/03/03	<5	<u> </u>	<u> </u>	<u> </u>	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-G-3-10'		<5	<5	<5	<5	<5	<5	 <5	 <5	<u></u> <5	<5	<1.0	<10	<10	<10	<10	<10
G-4	SS-G-4-1'	12/02/03	<5	<u></u> <5	<5	<u></u> <5	<5	<5	<5	<5	<5	<5	<1.0	<200	<200	<200	2,400	2,100
	SS-G-4-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<200	<200	250	1,500	1,400
	SS-G-4-10'	<del></del>	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	19	10
G-5	SS-G-5-1'	12/05/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	11	<10
	SS-G-5-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-G-5-10'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
PB-1	SS-PB-1-1'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SS-PB-1-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MS-1	SS-MS-1-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	16	150	1,700	480
***************************************	SS-MS-1-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	12	<10
140.0	SS-MS-1-10'	10/05/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
MS-2	SS-MS-2-1' SS-MS-2-5'	12/05/03	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	<1.0	<10	<10	<10	<10	<10
******************************	SS-MS-2-5' SS-MS-2-10'	***************************************	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	<1.0 <1.0	<10 <10	<10 <10	<10 <10	<10 <10	<10
MS-3	SS-MS-3-1'	12/05/03	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	<1.0	<10	<10	<10	<10	<10
1013-3	SS-MS-3-5'	12/05/05	NA NA	NA NA	NA	NA NA	NA NA	NA	NA	NA	NA NA	NA NA	<1.0	<10	<10	<10	<10	<10
***************************************	SS-MS-3-10'		NA	NA NA	NA	NA NA	NA NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
Prac	tical Quantitation	Limits	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	4	4	4	4	4

Table 3
Summay of Analytical Test Data for VOCs<sup>1</sup> and TPH-CC<sup>2</sup> in Soil Samples
Ameron International Facility
South Gate, California

						Volat	_	ic Compo		,	ug/Kg		Tota		(TPH-C	rocarbon C) in mg/ ethod 801		Chain
Boring ID	Sample ID	Date Sampled	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	4-Isopropyltoluene	Ethylbenzene	m,p-Xylene	o-Xylene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Toluene	C5-C12	C10-C12	C13-C15	C16-C22	C23-C32	>C32
MS-4	SS-MS-4-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-4-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-4-10°		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
MS-5	SS-MS-5-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-5-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-5-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
MS-6	SS-MS-6-1	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-6-5°		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-6-10°		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
MS-7	SS-MS-7-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
<b>1011000000000000000000000000000000000</b>	SS-MS-7-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-7-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
MS-8	SS-MS-8-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-8-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-MS-8-10°		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
FB-1	SS-FB-1-1'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	15
	SS-FB-1-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-1-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
FB-2	SS-FB-2-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<250	<250	2,900	58,000	20,000
	SS-FB-2-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<200	320	3,800	62,000	18,000
	SS-FB-2-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<200	<200	1,600	29,000	13,000
FB-3	SS-FB-3-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	30	28
	SS-FB-3-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-3-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
Prac	tical Quantitation	Limits	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	4	4	4	4	4

Table 3
Summay of Analytical Test Data for VOCs<sup>1</sup> and TPH-CC<sup>2</sup> in Soil Samples
Ameron International Facility
South Gate, California

						Volat	ile Organ (E	ic Compo EPA Meth			ug/Kg		Tota	il Petrole	(TPH-C	rocarbon: C) in mg/l thod 8015		Chain
Boring ID	Sample ID	Date Sampled	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	4-Isopropyltoluene	Ethylbenzene	m,p-Xylene	o-Xylene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Toluene	C5-C12	C10-C12	C13-C15	C16-C22	C23-C32	>G32
FB-3d	SS-FB-3d-1'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-3d-5		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
FB-4	SS-FB-4-10'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-4-15'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
***************************************	SS-FB-4-20'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	13	<10
FB-5	SS-FB-5-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
FB-6	SS-FB-6-3'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
***************************************	SS-FB-6-5'	***************************************	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-6-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
FB-8	SS-FB-8-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	17	<10
	SS-FB-8-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-8-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
FB-9	SS-FB-9-1'	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-9-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-FB-9-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
MB-1	SS-MB-1-1'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	170	130
MB-2	SS-MB-2-1'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
AB-1	SS-AB-1-1'	12/05/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-1-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-1-10'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-1-15'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-1-20'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
AB-2	SS-AB-2-1'	12/05/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-2-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-2-10'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-2-15'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
Prac	tical Quantitation	Limits	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	4	4	4	4	4

Table 3
Summay of Analytical Test Data for VOCs<sup>1</sup> and TPH-CC<sup>2</sup> in Soil Samples
Ameron International Facility
South Gate, California

						Volat	ile Organ (E	ic Compo EPA Meth		,	ug/Kg		Tota	I Petrole	(TPH-C	rocarbon C) in mg/ ethod 801		Chain
Boring ID	Sample ID	Date Sampled	1,2,4- Frimethylbenzene	1,3,5- Trimethylbenzene	4-Isopropyltoluene	Ethylbenzene	m,p-Xylene	o-Xylene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Toluene	C5-C12	C10-C12	C13-C15	C16-C22	C23 <i>-</i> C32	>C32
	SS-AB-2-20'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
AB-3	SS-AB-3-1'	12/05/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-3-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-3-10'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-3-15'	***************************************	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-3-20'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
AB-4	SS-AB-4-1'	12/05/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	62	18
***************************************	SS-AB-4-5'	***************************************	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-4-10'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-4-15'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-4-20'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
AB-5	SS-AB-5-1'	12/05/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-5-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-5-10'	***************************************	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-5-15'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-5-20'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
AB-6	SS-AB-6-1'	12/05/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
***************************************	SS-AB-6-5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-6-10'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-6-15'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-AB-6-20'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
RR-6	SS-RR-6-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	16	330	340
***************************************	SS-RR-6-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
RR-8	SS-RR-8-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	11	120	73
	SS-RR-8-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	11	140	86
RR-10	SS-RR-10-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<20	54	760	3,200	890
Prac	tical Quantitation	Limits	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	4	4	4	4	4

Table 3
Summay of Analytical Test Data for VOCs<sup>1</sup> and TPH-CC<sup>2</sup> in Soil Samples
Ameron International Facility
South Gate, California

						Volat	ile Organ (E	ic Compo			ug/Kg		Tota	I Petrole	(TPH-C	rocarbon C) in mg/ thod 801	•	Chain
Boring ID	Sample ID	Date Sampled	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	4-Isopropyltoluene	Ethylbenzene	m,p-Xylene	o-Xylene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Toluene	C5-C12	C10-C12	C13-C15	C16-C22	C23-C32	>C32
	SS-RR-10-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	74	160	500	2,000	650
SB-1	SS-SB-1-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3	SS-SB-3-1'	12/03/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4	SS-SB-4-1'	12/03/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ST-1	SS-ST-1-11.5°	12/02/03	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	<10	<10
	SS-ST-1-16.5'		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<1.0	<10	<10	<10	20	11
ST-2	SS-ST-2-4'	12/03/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	120	86
***************************************	SS-ST-2-9'	***************************************	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
AST-1	SS-AST-1-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	12	63	20
	SS-AST-1-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	10	120	75
AST-3	SS-AST-3-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	< 50	93	1,000	3,600	1,600
	SS-AST-3-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	15	230	1,300	510
AST-5	SS-AST-5-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<200	<200	340	3,200	2,500
***************************************	SS-AST-5-5'	***************************************	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<200	<200	<200	1,900	1,500
AST-6	SS-AST-6-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
	SS-AST-6-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	26	290	190
AST-7	SS-AST-7-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<200	<200	440	2,900	2,300
	SS-AST-7-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<200	<200	250	2,100	1,700
AST-8	SS-AST-8-1'	12/02/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	26	66	20
	SS-AST-8-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	13	65	120	27
T-2 <sup>3</sup>	SS-T-2-1'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
STG-1	SS-STG-1-1'	12/05/03	6,300	2,100	660	2,100	14,000	4,100	1,000	510	430	8,300	4,000	7,000	720	2,200	18,000	2,400
	SS-STG-1-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000	8,800	1,500	5,300	19,000	4,800
	SS-STG-1-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
HMS-1	SS-HMS-1-1	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	18	<10
	SS-HMS-1-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10
Prac	tical Quantitation	Limits	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	4	4	4	4	4

Table 3
Summay of Analytical Test Data for VOCs<sup>1</sup> and TPH-CC<sup>2</sup> in Soil Samples
Ameron International Facility
South Gate, California

			Volatile Organic Compounds (VOCs) in ug/Kg (EPA Method 8260B)											Total Petroleum Hydrocarbons Carbon Chain (TPH-CC) in mg/Kg (EPA Method 8015B)										
Boring ID	Sample ID	Date Sampled	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	4-Isopropyltoluene	Ethylbenzene	m,p-Xylene	o-Xylene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Toluene	C5-C12	C10-C12	C13-C15	C16-C22	C23-C32	>G32						
SP-2	SS-SP-2-3'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
***************************************	SS-SP-2-8'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
	SS-SP-2-13'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
CB-1	SS-CB-1-1'	12/03/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
***************************************	SS-CB-1-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
CB-2	SS-CB-2-1'	12/03/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	44	42						
	SS-CB-2-3'8"		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<200	<200	250	2,500	1,200						
S-2	SS-S-2-5'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
	SS-S-2-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
S-8	SS-S-8-1'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	68	39						
***************************************	SS-S-8-5'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	34	46						
	SS-S-8-10°		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	14						
GC-1	SS-GC-1-5'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
	SS-GC-1-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
V-1	SS-V-1-5'	12/04/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
	SS-V-1-10'		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<10	<10	<10	<10	<10						
HP-8	HP-8-10'	11/19/03	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0	NA	NA	NA	NA	NA	ΝA						
	HP-8-20'		< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
	HP-8-30'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
	HP-8-40'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
	HP-8-50'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
HP-10	HP-10-10'	11/23/03	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
	HP-10-20'		< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
	HP-10-30'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
	HP-10-40'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA						
	HP-10-50'		< 5.0	< 5.1	<5.2	<5.3	<5.4	<5.5	< 5.6	<5.7	<5.8	<5.9	NA	NA	NA	NA	NA	NA						
Prac	tical Quantitation	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	4	4	4	4	4							

Table 3
Summay of Analytical Test Data for VOCs<sup>1</sup> and TPH-CC<sup>2</sup> in Soil Samples
Ameron International Facility
South Gate, California

			Volatile Organic Compounds (VOCs) in ug/Kg (EPA Method 8260B)											Total Petroleum Hydrocarbons Carbon Chain (TPH-CC) in mg/Kg (EPA Method 8015B)								
Boring ID	Sample ID	Date Sampled	1,2,4- Trimethylbenzene	1,3,5- Trimethylbenzene	4-Isopropyltoluene	Ethylbenzene	m,p-Xylene	o-Xylene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Toluene	C5-C12	C10-C12	C13-C15	C16-C22	C23-C32	>C32				
HP-11	HP-11-10'	11/19/03	< 5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	<5.0	NA	NA	NA	NA	NA	NA				
	HP-11-20'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-11-30'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-11-40'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-11-50'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
HP-12	HP-12-10'	11/23/03	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-12-20'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-12-30'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-12-40'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-1-50'		< 5.0	< 5.1	<5.2	<5.3	< 5.4	< 5.5	< 5.6	< 5.7	< 5.8	< 5.9	NA	NA	NA	NA	NA	NA				
HP-13	HP-13-10'	11/19/03	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-13-20'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-13-30'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-13-40'		< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
	HP-13-50'		< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA	NA	NA	NA	NA	NA				
Pract	ical Quantitation	n Limits	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	4	4	4	4	4				

<sup>&</sup>lt;sup>1</sup> VOCs - Volatile Organic Compounds

Bold data represent exceedences of Method Detection Limits

ug/Kg micrograms per kilogram mg/Kg

mg/Kg milligrams per kilogram

<sup>&</sup>lt;sup>2</sup> Total Petroleum Hydrocarbons Carbon Chain

<sup>&</sup>lt;sup>3</sup> Sample was only analyzed for polychlorinated biphenyls and was non-detect

Method detection limits ranged from 10 to 250 mg/Kg

NA Sample not analyzed

## Table 1 Summay of Analytical Test Data for Grab Groundwater Samples Ameron International Facility 4635 Firestone Boulevard, Southgate, California

			Detected* CCR Metals <sup>1</sup> in mg/L (EPA Method 6010/7000 Series)												Total Pe Hydroc (TPH) i (EPA Meth	Vola	Volatile Organic Compounds (VOCs) in ug/L (EPA Method 8260B)											
Boring ID	Sample ID	Date Sampled	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Vanadium (V)	Zinc (Zn)	Gasoline Range TPH	Diesel Range TPH	benzene	1,1-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Bromodichloromethane	Dibromochloromethane	Trichloroethene	Bromoform	Vinyl Chloride	tert-Butanol	di-Isopropyl ether
HP-1	HP-1-W	11/13/2003			0.051					0.00081	0.16	0.007	0.15	***********************			0.51											
HP-2	HP-2-W	11/13/2003			0.054					0.00038	0.091	0.004	0.15				0.3			8.2				25				
HP-3	HP-3-W	11/14/2003			0.33	0.012	0.0079	0.064	0.013		0.16	0.017	0.2	0.036	0.059													
HP-4	HP-4-W	11/23/2003		0.008	0.04			0.01		0.028	0.01	0.0059	0.0094		0.05		0.38					0.67	1.5		3.2			
HP-5	HP-5-W	11/19/2003		0.0091	0.02	0.0050				0.00066	0.04	0.02			0.09		0.27				~~~~~					~~~~		
HP-6	HP-6-W	11/14/2003	0.000		0.081	0.0059	0.0004	0.032	0.0007		0.046	0.11	0.39	0.0000	0.082		0.55							400				
HP-7	HP-7-W		0.009	0.44	0.13	0.0056	0.0034	0.027	0.0067	0.000.47	0.032	0.0099	0.22	0.0083	0.03		0.55	- 0.4		12	8.7			130				
HP-8 HP-9	HP-8-W HP-9-W	11/19/2003		0.14	0.12			0.0092		0.00047	0.02	0.01			0.02		0.40	8.1	8.5							0.5		0.89
HP-9 HP-10	HP-9-W HP-10-W	11/23/2003 11/23/2003		0.02	0.03					0.0097	0.02	0.01	0.0069	~~~~~	0.05	***************************************	0.42	- 2 4	~~~							~~~~		
HP-11	HP-11-W	12/3/2003		0.01 <b>0.06</b>	0.11 0.14			0.01		0.0092	0.01	0.0093	0.0000	0.0034	0.08		0.3	2.1 4.5	4.8				0.57		2.2		150	4 5
HP-12	HP-12-W	12/3/2003		0.04	0.14					0.00086	0.06			0.0034	0.02		0.5	13	7.4								290	1.5 0.59
HP-13	HP-13-W	12/3/2003		0.04	0.08	•				0.0005	0.06				0.02				0.71								290	0.59
HP-14	HP-14-W	12/3/2003		0.04	0.07					0.00096	0.08			0.0032	0.02				0.71									
HP-14	(D) <sup>3</sup>	12/3/2003	NT <sup>4</sup>	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT					***************************************						
AW-1	AW-1-S	11/13/2003	INI	1111	0.091	INI	11/1	INI	1111	0.00092	0.0067	0.0096	0.092	1111	111	INI	3.1											
AW-1	AW-1-D	11/13/2003			0.073					0.00032	0.0007	0.05	0.15		0.012		0.97		8.5		1.1			6.2				***************************************
***************************************	n Contamina	***************************************	0.006	0.05	1	0.05	NG <sup>6</sup>	1 0* <sup>7</sup>	0.015*	0.002	NG	0.1	0.05	NG	5*	NG	NG	1	6	6	10	NG	NG	5	NG	0.5	NG	NG
	hod Reporti		0.005	0.005	0.003	0.003	0.003	0.003	0.015	0.0002	0.005	0.003	0.005	0.003	0.01	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	20	0.5
						_					_																	

## **Explanation and Notes:**

ug/Lmicrograms per literTPH-gTotal petroleum hydrocarbons - gasoline rangemg/Lmilligrams per literTPH-dTotal petroleum hydrocarbons - diesel range

Note\*: The metals beryllium, cadmium, silver, and thallium were not detected in any groundwater samples above their respective practical quantitation limit.

Checked by CC, 1/29/04

<sup>&</sup>lt;sup>1</sup> CCR Metals - The 17 metals listed in the California Code of Regulations, Title 22, Article 11.

<sup>&</sup>lt;sup>2</sup> Blank Space denotes that analyzed constituent was less than its laboratory method reporting limit.

<sup>&</sup>lt;sup>3</sup> (D) - denotes sample was collected as a duplicate sample.

<sup>&</sup>lt;sup>4</sup> NT - Sample not tested.

<sup>&</sup>lt;sup>9</sup> Maximum Contaminant Levels (MCLs) reported by the California Department of Health Services (DHS), November 2002.

<sup>&</sup>lt;sup>b</sup> NG - No primary or secondary MCL currently exists for constituent.

<sup>&#</sup>x27;\* (asterisk) denotes secondary MCL (consumer acceptance limits) is presented as no primary MCL exists for constituent. Bold values represent exceedences of MCLs